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Attorney Docket No. 41714.8001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RE APPLICATION OF: Kozlowski et al.

SERIAL No.: 10/734,858

FILED: December 11, 2003

FOR: **SEGMENTED POLYMERS AND THEIR CONJUGATES**

Examiner: Acquah, S.

Group Art Unit: 1711

Confirmation No. 1526

**Information Disclosure Statement After First Office Action but Before Final Action or Notice of Allowance–37 CFR 1.97(c)**

Mail Stop Amendment  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

1. Timing of Submission

This information disclosure is being filed **after** three months of the filing date of this application or **after** the mailing date of the first office action on the merits, whichever occurred last, but **before** the mailing date of either a final action under 37 CFR 1.113 or a Notice of Allowance under 37 CFR 1.311, whichever occurs first. The references listed on the enclosed Form PTO-1449 may be material to the examination of this application; the Examiner is requested to make them of record in the application.

2. Cited Information

Copies of the following references are enclosed:  
 References marked with a double asterisk (\*\*).  
 References marked by asterisks  
 All cited references except U.S. patents and/or published applications (See C.F.R. § 1.98(a)(2)(i)).

Copies of the following references can be found in parent U.S. Application No. \*:  
 All cited references  
 References marked with a single asterisk (\*).  
 The following:

The following reference is not in English. For each such reference, the undersigned has enclosed: (i) a translation of the reference; (ii) a copy of a communication from a foreign patent office or International Searching Authority citing the reference; (iii) a copy of a reference which appears to be an English-language counterpart; or (iv) an English-language abstract for the reference

prepared by a third party. Applicant has not verified that the translation, English-language counterpart or third-party abstract is an accurate representation of the teachings of the non-English reference, though, and reserves the right to demonstrate otherwise.

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3. Effect of Information Disclosure Statement (37 CFR 1.97(h))

This Information Disclosure Statement is not to be construed as a representation that: (i) a search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the cited information is, or is considered to be, material to patentability. In addition, applicant does not admit that any enclosed item of information constitutes prior art to the subject invention and specifically reserves the right to demonstrate that any such reference is not prior art.

4. Fee Payment

Applicant elects to pay the fee under 37 CFR 1.17(p) in the amount of \$180.00.

Enclosed is a check for \$180 in payment of the fee due.

The Commissioner is hereby authorized to charge any deficiency in fees to ensure timely submission of these papers to Deposit Account No. 50-2207.

5. Patent Term Adjustment (37 CFR 1.704(d))

The undersigned states that each item of information submitted herewith was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this statement. 37 C.F.R. § 1.704(d).

Respectfully submitted,  
Perkins Coie LLP



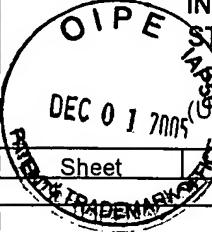
LeeAnn Gorthey  
Registration No. 37,337

Date: Dec. 1, 2005

Correspondence Address:

Customer No. 22918

Tel: 650 838-4403

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> Form PTO-1449 (Modified) (Use several sheets if necessary)				<b>COMPLETE IF KNOWN</b>	
 Sheet 1 of 3		Application Number		10/734,858	
		Confirmation Number		1526	
		Filing Date		December 11, 2003	
		First Named Inventor		Kozlowski et al.	
		Group Art Unit		1711	
		Examiner Name		Acquah, S.	
		Attorney Docket No.		41714.8001	

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	U.S. Patent or Application		Name of Patentee or Inventor of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		NUMBER	Kind Code			
	1	4670417		Iwasaki et al.	06/1987	
	2	5252714		Harris et al.	10/1993	
	3	5281698		Nitecki.	01/1994	
	4	5468478		Saifer et al.	11/1995	
	5	5650234		Dolence et al.	07/1997	
	6	5672662		Harris et al.	09/1997	
	7	5824784		Kinstler et al.	10/1998	
	8	5900461		Harris.	05/1999	
	9	5932462		Harris et al.	08/1999	
	10	6348558		Harris et al.	02/2002	

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent or Application			Name of Patentee or Applicant of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	NUMBER	Kind Code (if known)				
	11	PCT	WO 99/45964			09/1999		
	12	PCT	WO 01/26692			04/2001		

### OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.		
	13	Abuchowski et al., "Cancer Therapy with Chemically Modified Enzymes. I. Antitumor Properties of Polyethylene Glycol-Asparaginase Conjugates," <i>Cancer Biochem. Biophys.</i> , 7:175-186 (1984).		
	14	Andresz et al., <i>Makromol. Chem.</i> , 179:301-312 (1978).		
	15	Beauchamp et al., "A New Procedure for Synthesis of Polyethylene Glycol-Protein Adducts; Effects on Function, Receptor Recognition, and Clearance of Superoxide Dismutase, Lactoferrin, and $\alpha$ 2-Macroglobulin," <i>Analytical Biochemistry</i> , 131:25-33 (1983).		

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application(s).	

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Sheet	2	of	3	Attorney Docket No.	41714.8001

	16	Brinkley, M. A brief survey of methods for preparing protein conjugates with dyes, haptens, and cross-linking reagents. <i>Bioconjug. Chem.</i> <b>3</b> :2-13 (1992).
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	19	Elling et al., "Immunoaffinity Partitioning: Synthesis and Use of Polyethylene Glycol-Oxirane for Coupling to Bovine Serum Albumin and Monoclonal Antibodies," <i>Biotechnology and Applied Biochemistry</i> , <b>13</b> :354-362 (1991).
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	26	Means, G.E. and Feeney, R.E. Chemical modifications of proteins: history and applications. <i>Bioconjug. Chem.</i> <b>1</b> :2-12 (1990).
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	28	Pitha et al., "Detergents Linked to Polysaccharides: Preparation and Effects on Membranes and Cells," <i>Eur. J. Biochem.</i> , <b>94</b> :11-18 (1979).
	29	Sartore et al., "Enzyme Modification by MPEG with an Amino Acid or Peptide as Spacer Arms," <i>Applied Biochemistry and Biotechnology</i> , <b>27</b> :45-54 (1991).

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30	Sawhney et al., "Bioerodible Hydrogels Based on Photopolymerized Poly(ethylene glycol)-co-poly( $\alpha$ -hydroxy acid) Diacrylate Macromers," <i>Macromolecules</i> , <b>26</b> :581-587 (1993).
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32	Veronese et al., "Activation of Monomethoxy-Polyethylene Glycols by Phenylchloroformates and Modification of Ribonuclease and Superoxide Dismutase," <i>Applied Biochemistry and Biotechnology</i> , <b>11</b> :141-152 (1985).
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36	Zalipsky, "Chemistry of polyethylene glycol conjugates with biologically active molecules", <i>Advanced Drug Delivery Reviews</i> , <b>16</b> :157-182 (1995).
37	Product description from Shearwater Polymers, Inc., pp. 2-49. (1995).
38	Catalog of "Polyethylene Glycol Derivatives" from Shearwater Polymers, Inc.; pp. 1-53 (1997-1998).
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41	Nektar Molecule Engineering Catalog of "Polyethylene Glycol Derivatives for Advanced PEGylation", pp. 1-21 (2003).
42	Catalog of "PEG Derivatives, Phospholipid and Drug Delivery Materials for Pharmaceuticals" from NOF Corporation; pp. 1-46 (2003, 1 <sup>st</sup> ed).
43	Catalog of "PEG Derivatives, Phospholipid and Drug Delivery Materials for Pharmaceuticals" from NOF Corporation; pp. 1-50 (2003, 2 <sup>nd</sup> ed).

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